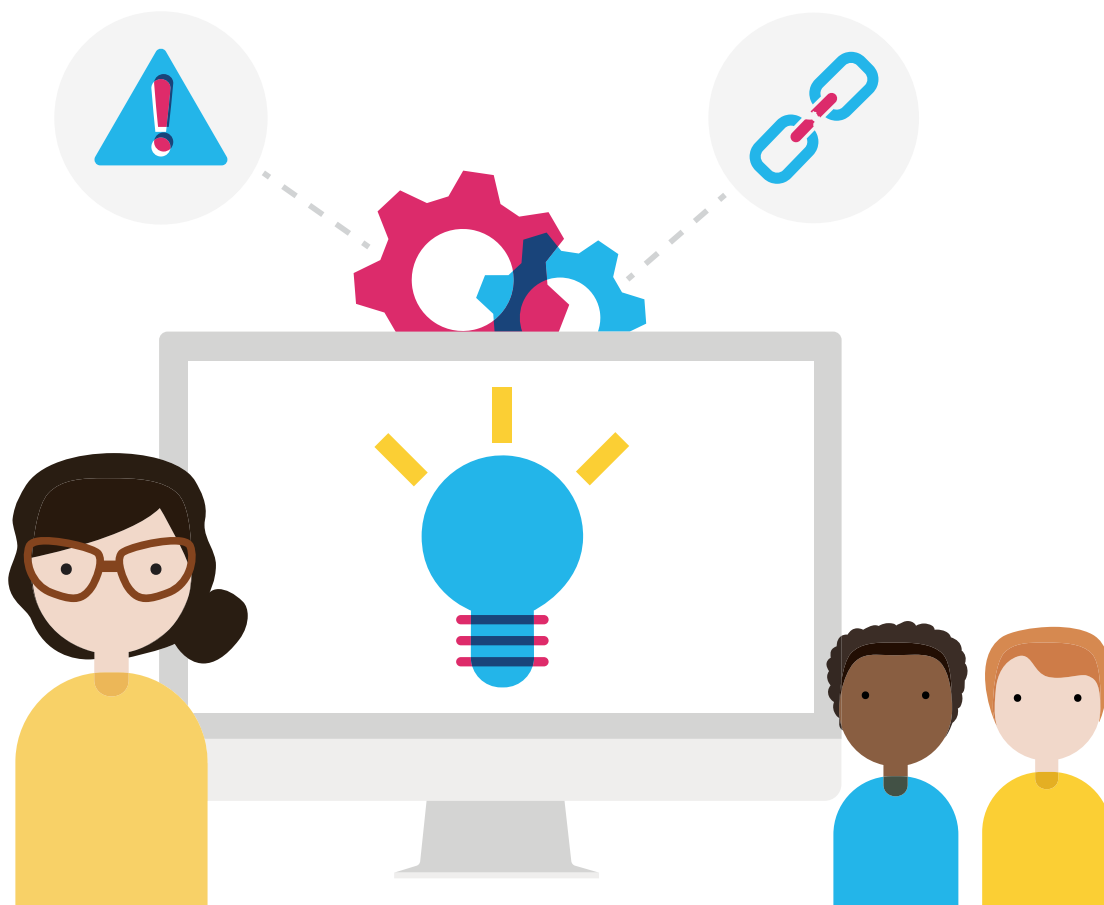


# Navigating K-12 Instruction and Informational Gaps

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# Introduction

**In a typical year, we look with anticipation at welcoming a new group of students to our classrooms. This fall, while that feeling will certainly again be one of excitement and possibilities to practice our craft, this year will clearly be atypical in many key ways.**

**Hopefully, we aren't looking forward with trepidation, but we do need to consider now how our year will open differently.**

It is clear that instructional and informational gaps are already forming, and will continue to grow among our student populations. It is therefore critical that we begin planning now and developing lessons, assessments, and professional learning to ensure we can start the next year as normally as possible, with a focus on continuity of learning and grounded decision-making. Without making good plans today, we will need to interrupt later to make major instructional adjustments, to find resources and time, or to realize professional learning needs.

**Here, we discuss the most important elements that should be top-of-mind now to mitigate the effects of the unusual landscape we find ourselves experiencing.**





# We Will Be Missing Information

**In contrast to the usual sources of rich data we use to plan, refine instruction, place students, and target groups, this year is likely to provide a limited bank of information about student performance over a course of study.**

While we would typically access state test data—complete with its breakdown by domain or strand—we will likely also be missing end-of-course exams, benchmark assessments, and other tools such as spring reading and math assessments.

Importantly, we are likely to be missing data yielding the best information to answer the most important question:

Where is a student at end-of-grade (or course)? The answer is often informed by the data referenced above, and it will be important that we understand where our incoming students' proficiency against previous grade-level standards lies. It may or may not be plausible to consider administration of a common assessment against essential grade-level standards.

## What assessments do you have ready to go?

Consider the availability of end-of-course assessments that can be pared down to the essentials or a set of short assessments that capture the essential standards in item sets. Avoid a traditional long-format end-of-course exam, as the need now is specific to students' proficiency against major grade-level standards. Administering a few assessments now can help fill in the gap against missing data as you make decisions about students for the upcoming school year.

**Think of targeting major skills and processes of the domain.**

The development of performance tasks, for example, can provide a wealth of information about student competency in a nice little package, and these can be completed by students at home or online if you have the architecture in place. The advantage to performance tasks is that—when written properly—they can quickly inform against the major development of domain skills and competencies rather than focus on details of content. These can be leveraged as an additional element a teacher, counselor, or parent can use to make decisions.

In either case, developing assessments and tasks now—along with a diagnostic assessment when school starts—can help to inform the resources, instructional planning, and professional development of teachers long before students return.





# We Know What Our Questions Are

**Even if it is not possible to assess students now, we already know what our questions related to addressing instructional and informational gaps are. So, that’s a real start to developing a plan.**

While we will open with all the same decisions we usually make—placement, grouping, intervention, and school improvement—this year we will add the notion that students will likely come to us with an instructional gap unlike what we’ve seen before and very likely on a wider scale.

## **What essential standards have not been taught (or assessed)?**

This is likely to be our biggest question in addressing the instructional gap. Which standards were not taught last year, or which standards were we unable to assess

well and get proficiency information against? Engaging small teams of teachers now in online communities will help to inform the answer to this question.

Working in vertically articulated task forces, these communities can identify essential standards that were neither taught nor assessed (noting each or both) and construct a plan for lessons surrounding these standards. Alternatively, finding ways to weave the missing standards into the instructional program is a desirable outcome. Building teams within your learning management system can support this collaborative work and keep it accessible to stakeholders over time.

## What information do we have available to make decisions?

Of course, a lot of information to make informed decisions will be available in the upcoming year. Now is the time to inventory two things:



- 1 The decisions that need to be made to place students, refine or develop a school-improvement plan, and allocate resources for curriculum supports and intervention



- 2 The data and information that are available to help guide those decisions

Having a complete inventory of each of these two areas can help us answer questions about where gaps exist or discover how new sources of data can be used to find answers. Once organized, a clearer picture of needs will emerge, and you can plan next steps. Evaluation of academic data in your SIS or assessment platform, of course, will be useful in making decisions. Look for classroom assessments, grades, large-scale assessment data, as well as prior years' state test data. All of these can be used to answer some questions. In other cases, you will find that data is missing.

Here, you can consider other ways to make decisions. **For example, is it time to reconsider how you place students into advanced courses? Do your current practices reflect best practices in K-12 education? Can teacher surveys provide information on students and be used to make placement decisions?**

Consider the questions around allocating resources for curriculum and instructional programming needed to support the instructional gaps your teams have identified. Will you need to supplement the grade-level curriculum with additional materials, or will you need to make new instructional resources available for educators teaching previous grade-level content to their students? The information you need for this may or may not be readily available, but having the questions in your inventory helps focus the conversation around needs.



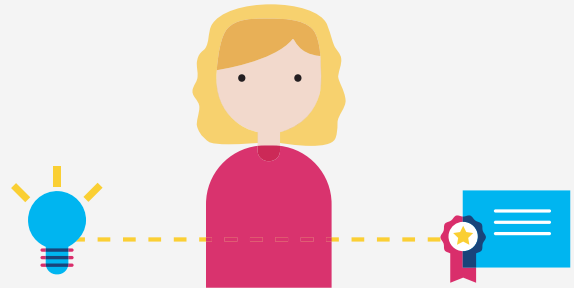
# We Know What to Assess First

Many districts use an early assessment for a variety of reasons: teacher evaluation, positioning students against prior knowledge, and forming small groups for instruction throughout the year.

We believe these early diagnostic assessments will be a valuable tool to revisit and refine the instructional decisions that need to be made as soon as students get to us.

David Ansубel, a 20th-century educational psychologist, said, "**The most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly.**" More than ever, this upcoming year will thrive if we do this well. To that end, we consider diagnostic assessment and the use of specific learning strategies as essential to filling the information gap we expect to see.

## Where are students along the continuum of learning?



## How can we use data effectively to make decisions?



**Measuring students' location is inextricably linked to being able to make the right instructional decision.**



# Develop a Diagnostic Assessment

## Developing a diagnostic assessment is different than developing many other educational assessments.

Although the full story is too long to discuss here, there is one key element that distinguishes the diagnostic in the sense we're discussing: the content of the items on the assessment. In this sense, we focus on standards that can be described as one of the following:



### Enduring standards

Enduring standards are those that have value beyond just a grade level or content domain. They will reappear in the context of extension or deepened understanding in subsequent grades. Examples of enduring standards are those that represent the continuum of more sophisticated writing over time or the application of science practices in a discipline.



### Transferable standards

Transferable standards are those that have value in that they are broad against the curriculum in other content areas. They're the standards we discuss when we talk about applying what a student learns in one class in another domain. We will often find them in the form of skills, such as interpreting a source or other process-oriented learning goals.



### Fundamental standards

Fundamental standards are those that provide a foundation on which subsequent knowledge will be constructed. They are essential because they serve to scaffold later content knowledge. They might be knowledge-learning targets, or they could be algorithms essential to the learning of later content.

As we consider the development of a diagnostic assessment for the upcoming year, we gear toward items with a standard falling into one or more of these categories as viable candidates for placement on the assessment. As mentioned, there are considerations around other elements, as well, including item difficulty, discrimination, and depth of knowledge.

# Strategize for Informal Assessment

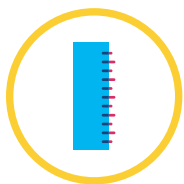
Once a diagnostic assessment has been given, we have a clearer view of next steps with our students.

There are several strategies that can be used early to inform the next steps well:



## Embed formative assessment strategies in lessons

Actively plan for engaging and informative formative assessment opportunities in the lesson plan itself. This encourages the intentional pause for measuring student progress and understanding. Provide actionable feedback to students and provide students the opportunities to engage with one another in constructing learning. Of course, instructional rubrics are an integral element of formative assessment, and encourage opportunities for students to understand their own position in learning.



## Measure incremental learning effectively

Consistent with the practices of formative assessment, it will be important to measure incremental learning very carefully in the upcoming year. It's not exactly progress-monitoring, but rather an approach to identifying the incremental learning that occurs within a lesson. Note the progression of learning along a standard and measure frequently.



## Leverage advance organizers

Developed with students, advance organizers can be powerful tools of metacognition and help students actively position their own learning against the anticipated learning outcomes. Importantly, these organizers can help teachers identify learning gaps quickly.

Be sure to consider any professional learning needed at the district or classroom level around assessment. Vendors are available to provide expert guidance with best practice in workshop-style formats or through your learning management system for faculty.

# We Know Short-Cycle Assessment Works

Consistent with our approach of assessment for learning mentioned earlier, we know that short-cycle assessment (SCA) has a well-grounded foundation in literature as a strong influence in promoting improved student outcomes.<sup>1</sup>

We think of SCA as a program of assessment embedded within the instructional plan, and it is considered on the timeframe of a couple of times per week to about every 2 weeks. Think of SCA as occurring both during the instruction of content as well as between what we might call units of instruction. Importantly, this highlights SCA as a cyclical process developed alongside the instructional model as shown in Figure 1. If you're working with an integrated system vendor, it's important to ensure that the vendor, not your district, is responsible for providing solutions based on a consistent interoperability standard.

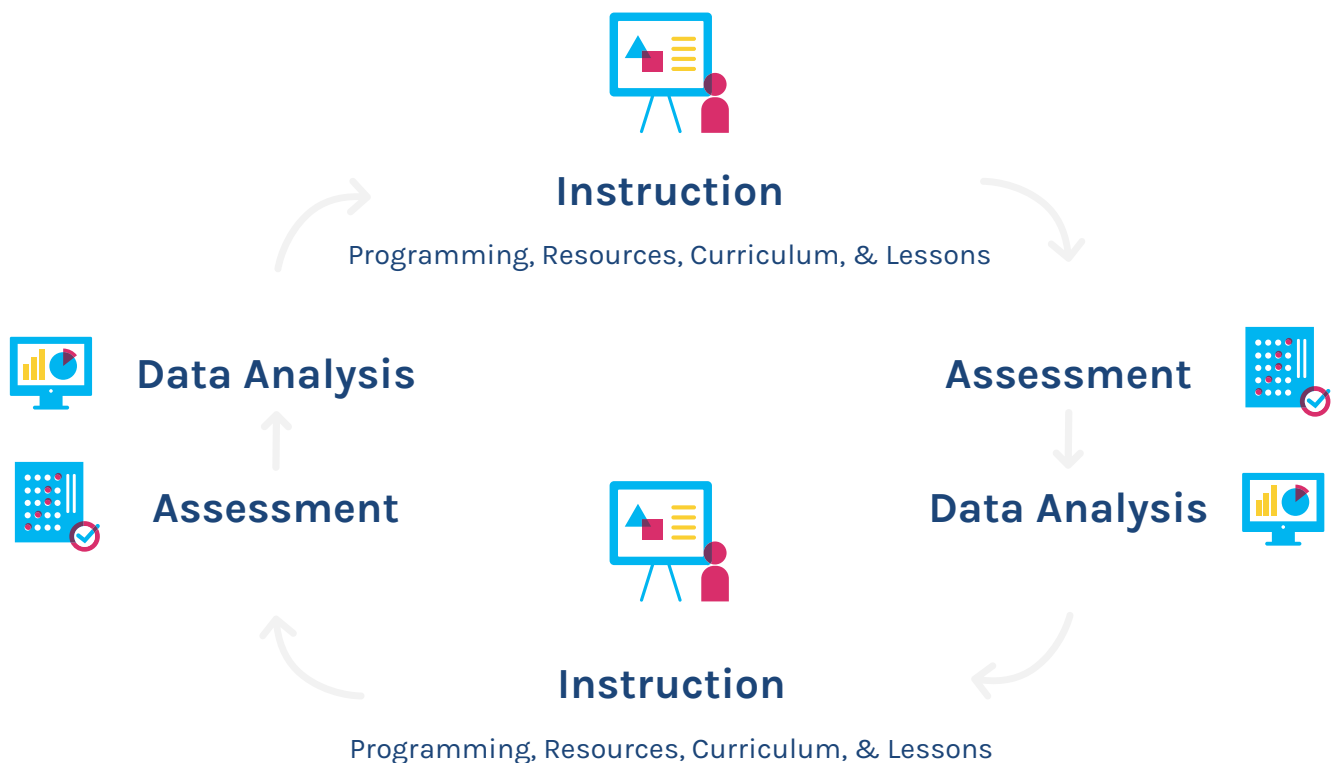


Figure 1. Developing short-cycle assessment program completes the cycle that begins with instruction and ends with instruction. Modified from Mandinach & Jackson, 2008.

<sup>1</sup>Source: Ghaicha, 2016; Popham, 2006; Riggan & Oláh, 2016

# Recognize the Value of SCA

In contrast to benchmarking or interim-type assessment, which does have its value, an SCA program affords several benefits that cannot be captured in longer-term assessments.

## SCAs offer teachers meaningful insight during instruction.

The most effective method of effecting a change in student achievement is to offer opportunities to measure against instructional outcomes while instruction is ongoing. This allows for fine-tuning instructional strategies within the instructional plan that can move students immediately toward proficient outcomes. Small-group instructional opportunities show themselves quickly, and students' instructional gaps are highlighted early in instruction rather than much later when reteaching or remediation take the place of simply adjusting strategy. A timely analogy might be thinking of this as "containment" versus the "mitigation" approaches to battling COVID-19.

## SCAs provide opportunities for timely, actionable feedback.

Student feedback is critical to the pathway toward proficiency, and an intentional SCA program is developed with this in mind. Empowering students to engage with feedback is the important component. Whether that engagement is with the student alone, in peer groups, or in back-and-forth with teachers is unimportant. Students should be required to respond in some way to the feedback provided.

## SCAs can help improve student self-efficacy.

When students respond to feedback, engage in self-assessment, and have a clear set of expectations around the process of assessment, research (Dochy, Segers, & Braeken, 2014) shows that student self-efficacy is improved. An SCA program will be an integral support to this by providing opportunities for these metacognitive activities to take place. Moreover, **students' motivation increases when self-efficacy improves**, and recent research (Bedford, 2017) suggests that **a growth mindset is encouraged as self-efficacy increases**. Here, then, we hit on a trifecta of elements that have shown to improve the learning outcomes of students—all encouraged through careful, intentional assessment such as that planned through an SCA program.

**Common short-cycle assessments** are a good way to begin the development of an SCA program. Engaging a small team to develop assessments in your district relieves classroom teachers of finding methods of assessment, and it helps focus early professional development on the use of SCAs and their data rather than on item and test construction activities. Leveraging the capacity of assessment banks can support efficient creation of assessments, as well. Moreover, common assessments can provide roll-up data for content supervisors and others to make broader program and curriculum decisions.

Professional development around a new program will be essential, and it should be built into a plan for developing such a program. Consider course development inside your LMS to provide modules around assessment literacy, using data to make instructional decisions, and professional development related to instructional strategies and methods for reaching targeted groups. Of course, as with other opportunities, your LMS or assessment platform vendor will have resources to support this process.

**Engaging a small team to develop assessments relieves classroom teachers of finding methods of assessment, and it helps focus early professional development.**





# We Need a Long-Term Plan

While we hope that an event such as the COVID-19 pandemic does not happen again, as we reflect in the midst of it on our level of preparedness, there are certainly areas on which we can focus to support a long-term approach to the continuity of education if such an event does arise in the future.

Here, we highlight three areas to consider in developing a long-term plan. A colleague termed it a "curriculum evacuation plan," and that might well sum up where we are in moving our teaching beyond our physical spaces.

- 1 Develop lessons and resources online
- 2 Establish professional development for digital learning
- 3 Assess for learning

## 1 Develop lessons and resources online

While we use our LMS for delivery of content all the time, making a long-term plan for all courses to be developed within the LMS should be a goal. Complete with the resources and curriculum to support learning, the ability to easily move into a digital delivery will support teachers and students equally in maintaining instruction. Moreover, the central development of courses can help support the congruence of courses across a district or school.

## 2 Establish professional development for digital learning

Teaching in an online format brings with it a new set of strategies and methods with which many teachers may be unfamiliar. Developing a professional development plan for teachers alongside a communication plan for parents will serve to prepare all teachers for online instruction with little downtime lost to the transition. As with face-to-face instruction, teacher efficacy is essential to positive instructional outcomes, and providing that in both philosophical and practical professional development offerings can help support teachers' ability. Consider professional learning around instruction, the curriculum, as well as assessment practice.

## 3 Assess for learning

Strong, systemic commitment in the practices of assessment for learning will serve to fill any of the voids a loss of face-to-face teaching may otherwise create. Beyond just highlighting the deficits students may have, formative assessment encourages students to be more intimately engaged in their own learning, and it fosters a culture of collaboration that will be instrumental in maintaining a classroom feel to an online course. Assessment becomes part of the instruction instead of the goal of instruction in such an environment.

## Conclusion

We certainly have a lot of questions, but we also have an array of resources we can use to find answers. A successful approach can be thought of along several strands, and we hope we helped you place that in a framework in the discussion above. Importantly, the engagement of several stakeholder groups will be needed, so a needs-analysis is central to moving forward. A focus on identifying priorities, communicating progress, and maintaining momentum toward goals will help support an outcome of an instructional model that maintains a continuity of education.



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